



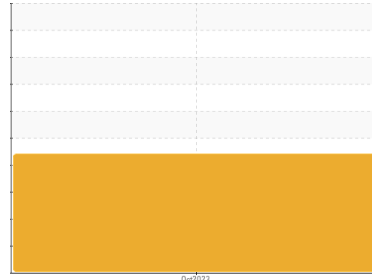
FUEL REPORT

Sample Rating Trend

WATER



Area
ALLSTATE INSURANCE [148505]
 Machine Id
79048064
 Component
Diesel Fuel
 Fluid
No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you filter this fluid before use. We advise that you follow the water drain-off procedure for this component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Corrosion

{not applicable}

Contaminants

There is a light amount of silt (particulates < 14 microns in size) present in the fuel. Free water present. There is no bacteria or fungus (yeast and/or mold) present in the sample.

Fuel Condition

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B).

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	CU0022431	---	---
Sample Date	Client Info	23 Oct 2023	---	---
Machine Age	hrs Client Info	329	---	---
Sample Status		ABNORMAL	---	---

PHYSICAL PROPERTIES

method	limit/base	current	history1	history2	
Specific Gravity	ASTM D1298*	0.839	0.841	---	---
Fuel Color	text Visual Screen*	Yllow	Orang	---	---
Visc @ 40°C	cSt ASTM D7279(m)	3.0	2.6	---	---
Pensky-Martens Flash Point	°C ASTM D7215*	52	59.4	---	---

SULFUR CONTENT

method	limit/base	current	history1	history2	
Sulfur	ppm ASTM D5185(m)	10	5	---	---

DISTILLATION

method	limit/base	current	history1	history2	
Initial Boiling Point	°C ASTM D2887*	165	171	---	---
5% Distillation Point	°C ASTM D2887*		195	---	---
10% Distill Point	°C ASTM D2887*	201	205	---	---
15% Distillation Point	°C ASTM D2887*		213	---	---
20% Distill Point	°C ASTM D2887*	216	220	---	---
30% Distill Point	°C ASTM D2887*	230	234	---	---
40% Distill Point	°C ASTM D2887*	243	247	---	---
50% Distill Point	°C ASTM D2887*	255	260	---	---
60% Distill Point	°C ASTM D2887*	267	273	---	---
70% Distill Point	°C ASTM D2887*	280	286	---	---
80% Distill Point	°C ASTM D2887*	295	301	---	---
85% Distillation Point	°C ASTM D2887*		311	---	---
90% Distill Point	°C ASTM D2887*	310	321	---	---
95% Distillation Point	°C ASTM D2887*		339	---	---
Final Boiling Point	°C ASTM D2887*	341	362	---	---

IGNITION QUALITY

method	limit/base	current	history1	history2	
API Gravity	ASTM D1298*	37.7	36	---	---
Cetane Index	ASTM D4737*	<40.0	48	---	---

CONTAMINANTS

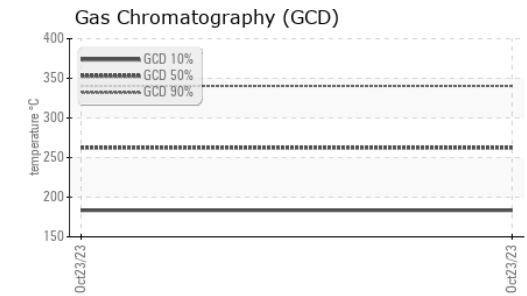
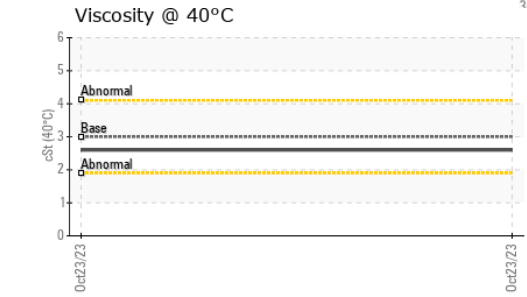
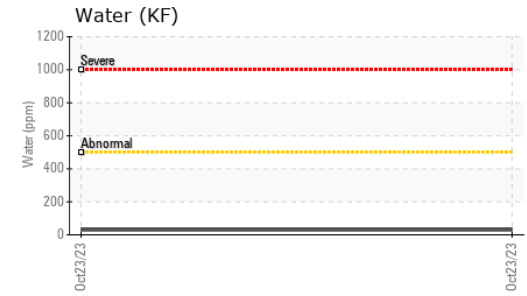
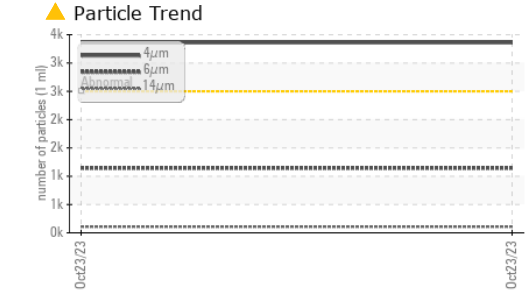
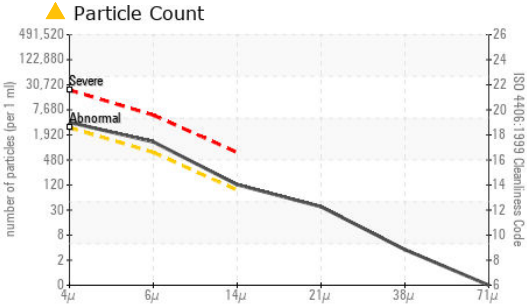
method	limit/base	current	history1	history2	
Silicon	ppm ASTM D5185(m)	<1.0	0	---	---
Sodium	ppm ASTM D5185(m)	<0.1	<1	---	---
Potassium	ppm ASTM D5185(m)	<0.1	0	---	---
Water	% ASTM D6304*	<0.05	0.003	---	---
ppm Water	ppm ASTM D6304*	<500	29.9	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	▲ 3360	---	---
Particles >6µm	ASTM D7647	>640	▲ 1144	---	---
Particles >14µm	ASTM D7647	>80	▲ 108	---	---
Particles >21µm	ASTM D7647	>20	▲ 32	---	---
Particles >38µm	ASTM D7647	>4	3	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 19/17/14	---	---



FUEL REPORT

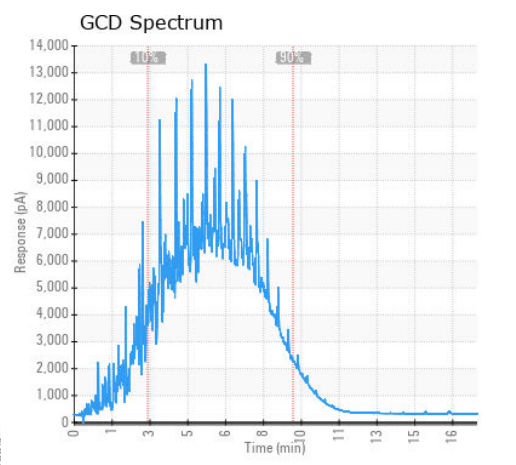
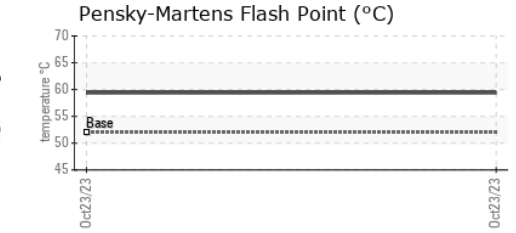
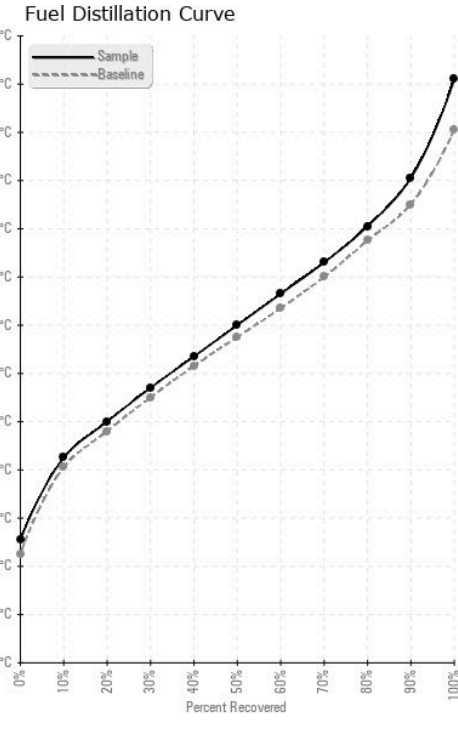


MICROBIAL	method	limit/base	current	history1	history2
Bacteria	CFU/ml	ASTM D6469* >=100000	0	---	---
Yeast	CFU/ml	ASTM D6469* >=100000	0	---	---
Mold	Colonies	ASTM D6469* MODER	NONE	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185(m) <0.1	0	---	---
Nickel	ppm	ASTM D5185(m) <0.1	0	---	---
Lead	ppm	ASTM D5185(m) <0.1	0	---	---
Vanadium	ppm	ASTM D5185(m) <0.1	0	---	---
Iron	ppm	ASTM D5185(m) <0.1	<1	---	---
Calcium	ppm	ASTM D5185(m) <0.1	<1	---	---
Magnesium	ppm	ASTM D5185(m) <0.1	0	---	---
Phosphorus	ppm	ASTM D5185(m) <0.1	<1	---	---
Zinc	ppm	ASTM D5185(m) <0.1	<1	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION
Sample No. : CU0022431 **Received** : 24 Oct 2023 **7175 PACIFIC CIRCLE**
Lab Number : 02591558 **Diagnosed** : 30 Oct 2023 **MISSISSAUGA, ON**
Unique Number : 5668637 **Diagnostician** : Kevin Marson **CA L5T 2A5**
Test Package : FUEL (Additional Tests: Bacteria, CC Flash, GC-PercFuel, PrtCount) **Contact: Elisia Johnson**
 To discuss this sample report, contact Customer Service at 1-800-268-2131. **elisia.johnson@cummins.com**
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. **T: (905)795-0050**
 Validity of results and interpretation are based on the sample and information as supplied. **F: (905)795-9252**